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Single Crystal Growth Of Solid D_2[1] BERNARD J. KOZIOZIEMSKI, GILBERT W. COLLINS, THOMAS P. BERNAT, *Lawrence Livermore National Lab* — Vapor deposited hexagonal close packed D_2 crystals can be grown as hexagons up to 16K. When grown closer to the triple point temperature, both flat disks and rectangular shaped crystals are observed rather than hexagons. These crystals contain facets for two different crystal orientations that persist up to T_{tp}. This is in contrast with previous experiments on rare gas solids and H_2 where the highest roughening transition temperature yet to be measured is $T_r = 0.8\ T_{tp}$. Finally, we estimate a lower bound on the surface stress of D_2.

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[X] Prefer Oral Session
[ ] Prefer Poster Session

Bernard Kozioziemski
koz@wente.llnl.gov
Lawrence Livermore National Lab

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